

US EPA ARCHIVE DOCUMENT

Data Evaluation Record  
**BRODIFACOUM**  
Wild Mammal Toxicity Test

**GUIDELINE NUMBER:** 71-3

**CITATION:** Ringer, R.K. and Richard J. Aulerich. Date no given, but, c. 1979. Determination of oral LD<sub>50</sub> of Brodifacoum for mink. Submitted by ICI Americas, Inc., Agricultural Products, Wilmington, Delaware 19897. RR 90-292 B.

**REASON FOR SUBMISSION:**

FIFRA '88 Reregistration.

RESULTS- Valid \_\_\_\_\_

Invalid \_\_\_\_\_

GUIDELINE- Satisfied \_\_\_\_\_

Partially Satisfied \_\_\_\_\_

Supplemental X

Not Satisfied X

**DISCUSSION:**

No DER was found in EEB's files for this study. The two highest concentrations are too widely separated to be of use. Each successively larger concentration should be 1.66 times that of the one before (or be about 0.6 of the one larger than itself). The sixth group is so much larger (4.7 times) than the fifth that the gap between the two groups made the LD<sub>50</sub> meaningless. If it had been 3.73 mg/kg (1.66 X 2.24 mg/kg) and the animals had still died, the LD<sub>50</sub> would drop to 3.73 mg/kg even though the mortality remained the same. We cannot tell the difference between the two possibilities from this study. The "Protocol for determination of oral LD<sub>50</sub> for Mink" specifies .04, .12, .36, 1.08, and 3.24 mg/kg. If it was believed that a higher range of concentrations was needed, then the entire range should have been increased, not just its highest member.

Some animals had bloody stools even at the 0.116 mg/kg level, therefore, the NOEL = 0.04 mg/kg.

If, as stated, the species presented a difficulty because food passes through their digestive tract to quickly, another subject should be chosen. Although, this may be a trait of the Mustelids generally and, therefore, the high LD<sub>50</sub> accurately reflects the conditions in the wild.

**CONCLUSIONS:**

The study is classified as "Supplementary" No LD<sub>50</sub> but a NOEL 0.04 mg/kg.

**REVIEWED BY:**

James J. Goodyear  
Biologist, Section 1  
Ecological Effects Branch  
Environmental Fate and Effects Division (H7507C)

Signature: James Goodyear  
Date: Jan 9, 1991

**APPROVED BY:**

Leslie W. Touart  
Acting Head, Section 1  
Ecological Effects Branch  
Environmental Fate and Effects Division (H7507C)

Signature: L. W. T.  
Date: 1-9-91

---

Page \_\_\_\_\_ is not included in this copy.

Pages 2 through 3 are not included in this copy.

---

The material not included contains the following type of information:

- \_\_\_\_\_ Identity of product inert ingredients.
- \_\_\_\_\_ Identity of product impurities.
- \_\_\_\_\_ Description of the product manufacturing process.
- \_\_\_\_\_ Description of quality control procedures.
- \_\_\_\_\_ Identity of the source of product ingredients.
- \_\_\_\_\_ Sales or other commercial/financial information.
- \_\_\_\_\_ A draft product label.
- \_\_\_\_\_ The product confidential statement of formula.
- \_\_\_\_\_ Information about a pending registration action.
- ☒ FIFRA registration data.
- \_\_\_\_\_ The document is a duplicate of page(s) \_\_\_\_\_.
- \_\_\_\_\_ The document is not responsive to the request.
- \_\_\_\_\_ Internal deliberative information.
- \_\_\_\_\_ Attorney-Client work product.
- \_\_\_\_\_ Claimed Confidential by submitter upon submission to the Agency.

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.

---